Please add claim 30, 31 and 32 as follows:

- 30. A steel processing material for addition into a heat of steel in an electric arc furnace comprising:
 - (a) a dried post combustion material (PCM) recycled from the exhaust of an electric arc furnace,

and

(b) a slag foaming material;

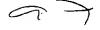
wherein the recovery of iron from the steel processing material is only a portion of the iron in the heat.

- 31. The method of manufacturing steel of claim 22 wherein the steps are repeated until the concentration of heavy metals in the solid waste material reaches a set point.
- 32. The method of manufacturing steel of claim 31 further comprising sending the PCM to a reclamation process once the concentration of heavy metals in the PCM reaches the set point.

Please amend claims 1, 8-20, and 22-27 as follows:

- 1. (Amended) A steel processing material for addition into a heat of steel in a steel making furnace comprising:
 - (a) a dried post combustion material (PCM) recycled from the exhaust of the steel making furnace, and
 - (b) a slag foaming material.
- 8. (Amended) A method of recycling exhaust waste material from an electric arc furnace comprising:
 - (a) recovering the exhaust waste material from an electric arc furnace

- (b) drying the exhaust waste material;
- (c) adding scrap steel to the electric arc furnace; and
- (d) adding the exhaust waste material to the electric arc furnace wherein iron from the exhaust waste material is recycled.
- 9. (Amended) The method of recycling the exhaust waste material of claim 8 wherein drying is conducted in a screw auger dryer.
- 10. (Amended) The method of recycling the exhaust waste material of claim 9 wherein the screw auger dryer comprises an induction heater.
- 11. (Amended) The method of recycling the exhaust waste material of claim 9 further comprising sorting the PCM to obtain a fraction having an average particle size processable by the screw auger prior to drying.
- 12. (Amended) The method of recycling the exhaust waste material of claim 11 wherein exhaust waste material is sorted to obtain a fraction having a particle size of about 3/4 of an inch.
- 13. (Amended) The method of recycling the exhaust waste material of claim 8 wherein the drying is conducted in a rotary dryer.
- 14. (Amended) The method of recycling the exhaust waste material of claim 8 wherein drying the exhaust waste material comprises drying the exhaust waste material to not greater than about 2% water content.
- 15. (Amended) The method of recycling the exhaust waste material of claim 8 wherein drying the exhaust waste material comprises air drying the exhaust waste material to about 6% to about 8% water content.
- 16. (Amended) The method of recycling the exhaust waste material of claim 8 further comprising sorting the exhaust waste material to obtain a fraction having an average particle size processable by an injection gun.



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- 17. (Amended) The method of recycling the exhaust waste material of claim 16 wherein the exhaust waste material is sorted to obtain a fraction having a maximum particle size of about 5/16 of an inch.
- 18. (Amended) The method of recycling the exhaust waste material of claim 8 further comprising conveying the dried exhaust waste material to a first container.
- 19. (Amended) The method of recycling the exhaust waste material of claim 8 further comprising mixing the dried exhaust waste material with a slag foaming material.
- 20. (Amended) The method of recycling the exhaust waste material of claim 19 wherein mixing is conducted by adding the dried exhaust waste material and concurrently adding slag foaming material into a container.
- 22. (Amended) A method of manufacturing steel in an electric arc furnace comprising:
 - (a) melting in the electric arc furnace a first heat of steel comprising a liquid steel portion and a foamy slag portion;
 - (b) evacuating the emissions from the first heat wherein solid waste material is exhausted from the heat;
 - (c) mixing the solid waste material with a slag foaming material to form a steel processing material; and
 - (d) adding the steel processing material into a second heat of steel.
 - 23. (Amended) The method of manufacturing steel of claim 22 wherein the solid waste material is recovered from the first heat.
 - 24. (Amended) The method of manufacturing steel of claim 22 further comprising drying the solid waste material before mixing the solid waste material with a slag foaming material.

- 25. (Amended) The method of manufacturing steel of claim 22 wherein the adding of the steel processing material into a second heat of steel comprises injecting the steel processing material with an injection gun.
- 26. (Amended) A steel processing material, at least partially recycled from an electric arc furnace, comprising:
 - (a) an iron-bearing material having less than 2% moisture by weight and recycled from the arc furnace; and
 - (b) a slag foaming material

wherein the steel processing material contributes to the foaming of slag when added to a heat of steel in the arc furnace and reacts with the heat to recover iron from the iron-bearing material to the heat, further wherein less than about 1% by weight of the total iron in the heat being recovered iron.

27. (Amended) The steel processing material of claim 26 wherein the iron-bearing material is post combustion material, bag house dust, scale, or iron fines.

